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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,745	03/08/2004	Mark K. Hennig	HO-P02930US0	3393

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EXAMINER
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JULES, FRANTZ F

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/797,745

Applicant(s)

HENNIG, MARK K.

Examiner

Frantz F. Jules

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6 and 7 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Ingram (US 6,585,019 B1).

Ingram discloses an air inflation system having at least one axle with at least one wheel having a pneumatic tire at each end of the axle and a wheel end assembly connected to each end of the axle and including a hubcap (54) forming a compartment for retaining lubricant for the wheel bearings, said vehicle having an air supply for supplying air to the inside of the axle, a pneumatic rotary union (10), having a first stationary part (40) and a second rotatable part (45), in communication between the air inside the axle and the tire, and coaxially aligned with the axle comprising, said hubcap having an opening coaxially aligned with the rotary union, a plug (50) releasably supported in the opening including a support opening axially aligned with the rotary union (10), said plug including one or more air vents (86 or 99) positioned outside of the support opening, and said support opening supporting a through tee (100, 104), see fig. 4, in communication with the air supply, a vent shield (84) covering the outside of the air vents, and one end of the rotatable part (45) of the rotary union, said hubcap opening being of a size for adding and visually inspecting lubrication level and for removing the stationary part of

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the rotary union through the hubcap opening without removing the hubcap as shown in fig. 3.

The plug consists of a rigid material for providing a firm support for the through tee as shown in fig. 4, and said plug includes a head which receives the seal (66) at one end for abutting the outside of the hubcap and an extension extending through and beyond the inside of the hubcap opening and terminating in a second end spaced from the hubcap for diverting lubricate away from the air vents, and a circular seal (66) surrounds the plug intermediate the first and second ends sealing against the inside of the hubcap and releasably holding the plug in position in the hubcap opening in accordance with claim 2-3.

The plug includes surfaces exposed to the interior of the hubcap and the surfaces are positioned to direct lubrication in the hubcap away from the air vents in accordance with claim 3.

The plug including a Knurled surface for ease of removing the plug from the hub cap opening in accordance with claim 7.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ingram (US 6,585,019) in view of Denton (US 2005/0062340 A1).

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Ingram teaches all the limitations of claim 6 except for a plug including a recess around the exterior surface adjacent the second end of the plug. The general concept of providing a recess around the exterior surface adjacent the second end of the plug is well known in the art as illustrated by Denton which discloses the teaching of a recess (38) around the exterior surface adjacent the second end of the plug in a hub cap. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ingram to include the use of a recess around the exterior surface adjacent the second end of the plug of his advantageous air inflation system in order to maintain the plug in a tight or stable relation thereby reducing the risk of loosening.

***Allowable Subject Matter***

5. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Slesinski et al, Ingram et al'134, Hennig'238 and Stech are cited to show related air inflation system comprising a plug within a hub cap.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 272-6681. The examiner can normally be reached on Monday-Thursday and every other Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

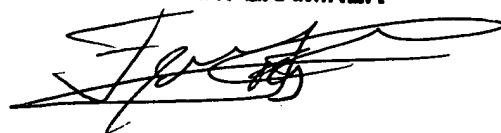
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules  
Primary Examiner  
Art Unit 3617

FFJ

July 26, 2005

**FRANTZ F. JULES**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Frantz', with a long horizontal flourish extending to the right.